ture I reviewed only cited convolvulaceous foodplants for this moth, but Silva and d'Araujo (1968) list *Tabemamontana coronaria* (Apocynaceae).

Pleuroptya silicalis (Guenee). Larvae of this species were collected and reared on *Ipomoea batatas, I. setifera, Merremia umbellata* (Convolvulaceae) and *Rivinia humilis* (Phytolacaceae). The distribution of this species includes Panama, Guyana and Brazil (Druce 1881). Bruner et al. (1975) recorded it from Cuba on *Bouganvillea spectabilis* (Nyctaginaceae) and *Bohemeria nicea* (Urticaceae).

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LITERATURE CITED

- ALAYO, P. & E. VALDES. 1982. Lista anotada de los microlepidópteros de Cuba. Academia de Ciencias de Cuba, La Habana. 122 pp.
- BRUNER, S. C., SCARAMUZZA, L. C. & A. R. OTERO. 1975. Catálogo de insectos que atacan a las plantas económicas de Cuba. Academia de Ciencias de Cuba, Instituto de Zoología, La Habana. Ed. Academia, 2da. edición, revisada y aumentada. 399 pp.
- COVELL, C. V. 1984. A field guide to the moths of eastern North America. Houghton Mifflin Co., Boston. 496 pp.
- DRUCE, H. 1881. Biologia Centrali-Americana. Lepidoptera, Heterocera. Vol. 1. London. 490 pp.
- HAMPSON, G. F. 1901. Catalogue of the Lepidoptera Phalaenae in the collection of the British Museum, London. London, British Museum (Natural History). 690 pp.
- PASSOA, S. 1985. Taxonomy of larvae and pupae of economically important Pyralidae in Honduras. Unpubl. M. Sc. Thesis, Univ. Florida, Gainesville, Florida. 486 pp.
- SILVA, A. G. & A. D'ARAUJO. 1968. Quárto catálogo dos insetos que vivem sobre plantas do Brasil. Rio de Janeiro, Minestério de Agricultura, pt. 2, to. 1. 622 pp.
- WATSON, A. & D. T. GOODGER. 1986. Catalogue of the neotropical tiger-moths. London, British Museum (Natural History). Occas. Pap. Syst. Entomol. No. 1. 71 pp.

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NEW ANT ASSOCIATIONS FOR GLAUCOPSYCHE LYGDAMUS DOUBLEDAY (LYCAENIDAE)

Additional key words: myrmecophily, silvery blue, Astragalus.

Larval myrmecophily among the Lycaenidae is well known and documented. In North America, the silvery blue, *Glaucopsyche lygdamus* Doubleday, and its associated ants have been studied by Pierce and Mead (1981) and Pierce and Easteal (1986). Larvae of *G. lygdamus* secrete substances (e.g., sugars, amino acids) that attract and feed ants, while ants provide protection against predators and parasitoids (Pierce & Easteal 1986).

While collecting in the Ozarks (Christian County, Missouri) in April 1996, we discovered a colony of *G. lygdamus*. We attempted to find its larval host by observing adult females and searching legumes for larvae. We subsequently discovered that most larvae were found on *Astragalus crassicarpus* var. *trichocalyx* (Nutt.) (Fabaceae); *Vicia caroliniana* Walt. (Fabaceae) was also infrequently used. The larvae often were tended by ants, and we noted size discrepancies among the ants. A few ants were collected for identification purposes. In a return trip to the area in 1997, we decided to look more closely at the ant-larva relationship and collect a larger sample of larvae and their associated ant tenders. We also observed that the larger instars appeared to be tended by larger ants.

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Pierce and Esteal (1986) recorded six species of ants that tended *G. lygdamus* in Colorado and Ballmer and Pratt (1991) listed three species in California. We found eight species in Missouri: *Prenolepis imparis* (Say), *Camponotus pennsylvanicus* (De Geer), *Camponotus americanus* Mayr, *Formica schaufussi dolosa* Wheeler, *Tapinoma sessile* (Say), *Monomorium minimum* (Buckley), *Crematogaster punctulata* Emery, and *Leptothorax pergandei* Emery. Of these ants, only *T. sessile* had been previously reported as tending *G. lygdamus*.

We had hypothesized that the smaller species of ants were tending earlier instars, so we grouped ant species into three size categories: large (7.0-9.0 mm; C. americanus, C. penn-sylvanicus, F. s. dolosa), small (2.5-4.0 mm; C. punctulata, P. imparis, T. sessile, L. pergandei), and minute (<2.0 mm; M. minimum). Large ants tended second, third, and fourth instars; small ants tended second and third instars, and minute ants tended first instars. However, larval samples may have been unrepresentative because first and second instars usually burrow into the inflorescence and do not often come in contact with ant tenders? (Pierce & Easteal 1986). It also seemed that the number of ant tenders per larva increased as ant size decreased, which would be consistent with Wagner's (1993) observations on Hemiargus isola (Reakirt). Most larva we found were feeding on open flowers or buds, with very few on stems or leaves. No statistical testing was attempted due to the small sample sizes.

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LITERATURE CITED

BALLMER, G. R. & G. F. PRATT. 1991. Quantification of ant attendance (myrmecophily) of lycaenid larvae. J. Res. Lepid. 30:95–112.

PIERCE, N. E. & S. EASTEAL. 1986. The selective advantage of attendant ants for the larvae of a lycaenid butterfly, *Glaucopsyche lygdamus*. J. Animal Ecol. 55:451-462.

PIERCE, N. É. & P. S. MEAD. 1981. Parasitoids as selective agents in the symbiosis between lycaenid butterfly larvae and ants. Science 211:1185–1187.

WAGNER, D. 1993. Species-specific effects of tending ants on the development of lycaenid butterfly larvae. Oecologia 96:276–281.

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ON THE TRUE TYPE LOCALITIES OF *MESOTAENIA VANINKA DELAFUENTEI* NEILD AND *MEMPHIS VILORIAE* PYRCZ & NEILD (NYMPHALIDAE)

Additional key words: butterflies, holotypes, Lepidoptera, Pantepui, Venezuela.

In his recent book on the butterflies of Venezuela, A. Neild (1996) described the new subspecies *Mesotaenia vaninka delafuentei*, apparently based on a color picture made by J. Wojtusiak of the unique female specimen at the Museo del Instituto de Zoología Agrícola, Maracay, Venezuela (MIZA). Neild provided the following in the text: "an extraordi-